

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

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In the Matter of )  
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Report on Rural Broadband Strategy )  
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GN Docket No. 09-29

**COMMENTS OF STEPHOUSE NETWORKS**

**I. INTRODUCTION**

Stephouse Networks, by its undersigned counsel, submits these brief comments in response to the Federal Communications Commission's (Commission) March 10, 2009 Public Notice seeking comments and recommendations on how the Commission and Secretary of the United States Department of Agriculture (Secretary or USDA) should develop and implement a comprehensive rural broadband strategy.<sup>1</sup>

A broadband Internet service provider specializing in high-speed wireless and wired Internet solutions, including DSL, Metro Ethernet, Fiber, WiMAX, and Wi-Fi, Stephouse Networks serves the needs of residential, small business, and enterprise customers throughout the United States, providing rural residential customers with license-exempt wireless broadband

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<sup>1</sup> See, Section 6112 of the Food, Conservation, and Energy Act of 2008 (2008 Farm Bill), Pub. L. 110-246, 122 Stat. 1651 (2008) (2008 Farm Bill), which directs the Commission, in consultation with the USDA Secretary, to develop a comprehensive rural broadband strategy and submit it as a report to Congress. The Commission's Public Notice further observes that the resulting rural broadband strategy will dovetail with the Congress's more recent requirement under the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, 123 Stat. 115 (2009) (Recovery Act), that the Commission develop a comprehensive national broadband plan.

service ranging in speeds from 1 Mbps download/256 Kbps upload, to 10 Mbps download/1 Mbps upload.<sup>2</sup>

Operating from its base in Portland, Oregon, since 2002, Stephouse Networks has made steady progress in delivering wireless broadband services to underserved communities in the Pacific Northwest, including, especially, the outlying rural areas north of the Portland metro area in and around Southwest Washington.<sup>3</sup> Moreover, even prior to the Recovery Act, Stephouse Networks developed a strategic plan that—subject to the availability of funding—would expand its wireless network in up to 26 additional outlying rural communities in Eastern Oregon and Southwest Washington.<sup>4</sup> Stephouse Networks believes that wireless broadband presents the most optimal, cost-effective solution for serving rural areas with difficult terrain and low population densities—as is the case in the rolling foothills and mountainous region of Southwest Washington and that portion of the Columbia River Gorge that traverses North Central and Eastern Oregon.

## **II. STEPHOUSE NETWORKS' RECOMMENDATIONS FOR DEVELOPING AND FURTHERING THE ADOPTION OF A COMPREHENSIVE RURAL BROADBAND STRATEGY AIMED AT ENSURING AFFORDABLE ACCESS TO ADVANCED TELECOMMUNICATIONS AND INFORMATION SERVICES TO ALL AMERICANS**

### **A. Make the Most Efficient Use of All Available Broadband Funding by Coordinating Recovery Act Programs with Traditional RUS Infrastructure and Broadband Programs.**

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<sup>2</sup> To be sure, Stephouse Networks typically provides its non-rural enterprise customers with 100Mbit service, up and down, through both fiber-based Ethernet and wireless microwave Ethernet facilities, as well as has the capability to provide such customers with multi-gigabit service.

<sup>3</sup> Apart from serving underserved neighborhoods in the North Portland metro areas of St. John, Linnton, North Marine Drive, and parts of Jantzen Beach, which, incredibly, still have no access to DSL, Stephouse Networks currently provides residential Internet services to the rural Southwest Washington communities of Woodland, Amboy, and Ariel.

<sup>4</sup> These underserved communities range in population from 24 to 2,000 inhabitants—with 13 them having populations of less than 500 inhabitants, and only one of them approaching a population near 5,000 inhabitants.

In its network deployment throughout Oregon and Washington, Stephouse Networks consistently encounters “pockets” of communities that have no access to broadband services, or, alternatively, broadband services capable of only minimal threshold speeds. It is often the case that these “pockets” of communities do not fit neatly into the “rural area” definition – whether before or after the revisions mandated by the 2008 Farm Bill – because the discrete area of need may be just a small part of a larger community that is already adequately served (as in the case of Jantzen Beach, an underserved community in Portland), or the unserved community may be too close in proximity to a population center. The Recovery Act exempted the USDA’s Rural Utilities Service (RUS) from the “rural area” definition with respect to the \$2.5 billion authorized by the Act, and imposed an alternative standard that 75% of the area to be served must be in a rural area without sufficient access to high-speed broadband service. The NTIA, on the other hand, has no apparent “rural” constraints on disbursing its \$4.7 billion allocated by the Recovery Act, and is charged with identifying unserved and underserved areas where broadband deployments would not be economically feasible absent federal assistance.

When considering all of the available broadband funding sources, it seems reasonable to draw the high-level conclusion that there are (i) funds allocated to existing programs with relatively narrow definitions of “rural;” and (ii) funds allocated under the Recovery Act with less constrictive definitions of “rural” and a greater emphasis on unserved and underserved communities. Assuming that the timing of available funds under all programs is not exceptionally disparate, Stephouse Networks encourages the responsible agencies to coordinate efforts on the front end to steer applications clearly satisfying the traditional “rural” definitions to the existing programs, and direct applications that might not otherwise fit in the traditional “rural” categories to the Recovery Act programs.

B. Adopt Policies to Maximize the Availability of Licensed and Unlicensed Spectrum.

- i. *Increased availability of unlicensed spectrum will stimulate the development of additional broadband technologies and extend broadband services to unserved communities.*

Competitive use of license-exempt frequencies is a cost-effective way to encourage broadband deployment in the near term. In a relatively short period of time, the availability of unlicensed spectrum has spurred development of new technologies to take advantage of that spectrum—all of which is necessary for the United States to keep pace with the capabilities of international wireless broadband networks. The Commission’s comprehensive broadband strategy report should include policy support for broadband applications using unlicensed spectrum. While such applications may not currently be considered the “gold standard” of long-term, high-speed broadband network solutions, unlicensed spectrum offers providers a quick and cost-effective method of extending broadband services to unserved and underserved communities, especially where immediate fiber deployment is not feasible under any means.

- ii. *The Commission’s rules should advance, not impede, the most effective use of available spectrum.*

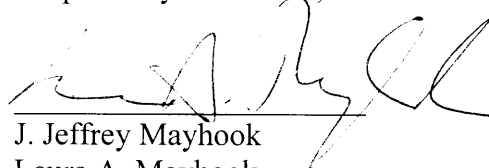
In addition to allocating additional frequencies for license-exempt use, the Commission should work to remove obstacles to the active use of any spectrum, licensed or unlicensed. Obstacles to active use may take the form of overly expansive protections against interference, or overly relaxed requirements concerning a licensee’s actual use of assigned spectrum. As just one example in Stephouse Networks’ recent experience, Stephouse Networks is forced to use Wi-Fi rather than its preferred WiMax technology in those areas within an 80 km radius of a particular earth station, even though that earth station is arguably inactive, or—at best—used on an exceptionally infrequent basis. Absent this impractical restriction, Stephouse Network’s

customers would have more robust broadband access with WiMax, which Stephouse could easily provide without impacting the earth station. As part of its report on a comprehensive rural broadband strategy, Stephouse Networks urges the Commission to work closely with the wireless industry to ensure that its rules keep pace with prevailing technologies and to also consider a process to support expedited consideration of waiver requests where an existing regulation concerning the use or licensing of spectrum directly impedes broadband deployment.

### **III. CONCLUSION**

Stephouse Networks regularly identifies “pockets” within communities – both urban and rural – that do not have adequate access to broadband services, and, thus, appreciates the challenges faced by the Commission, USDA and NTIA in prioritizing the disbursement of the limited resources made available by the Recovery Act, particularly when the “pockets” are no less deserving of funding than more insular rural areas. In addition to coordinating the interagency effort to disburse the funds to where they are needed the most, the Commission can promote broadband deployment by ensuring that its wireless spectrum policies encourage active use of all spectrum and maximum availability of unlicensed spectrum.

Respectfully Submitted,



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